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#### REMARKS

This paper is responsive to any paper(s) indicated above, and is responsive in any other manner indicated below.

#### REFUSAL OF EXAMINER INTERVIEW NOTED

The Undersigned respectfully makes note of the Examiner's refusal to grant an examiner interview after final rejection in the present application.

#### PENDING CLAIMS

Claims 1-14 were pending, under consideration and subjected to examination in the Office Action. Appropriate claims have been amended, canceled and/or added (without prejudice or disclaimer) in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, such changes are unrelated to any prior art or scope adjustment and are simply refocused claims in which Applicant is presently interested. At entry of this paper, Claims 1-14 will be pending for further consideration and examination in the application.

#### REJECTION UNDER 35 USC '103

The 35 USC '103 rejection of claims 1-14 as being unpatentable over Parl et al. (U.S. Patent 6,259,404) in view of Bertrand et al. (U.S. Patent 5,552,989) is respectfully

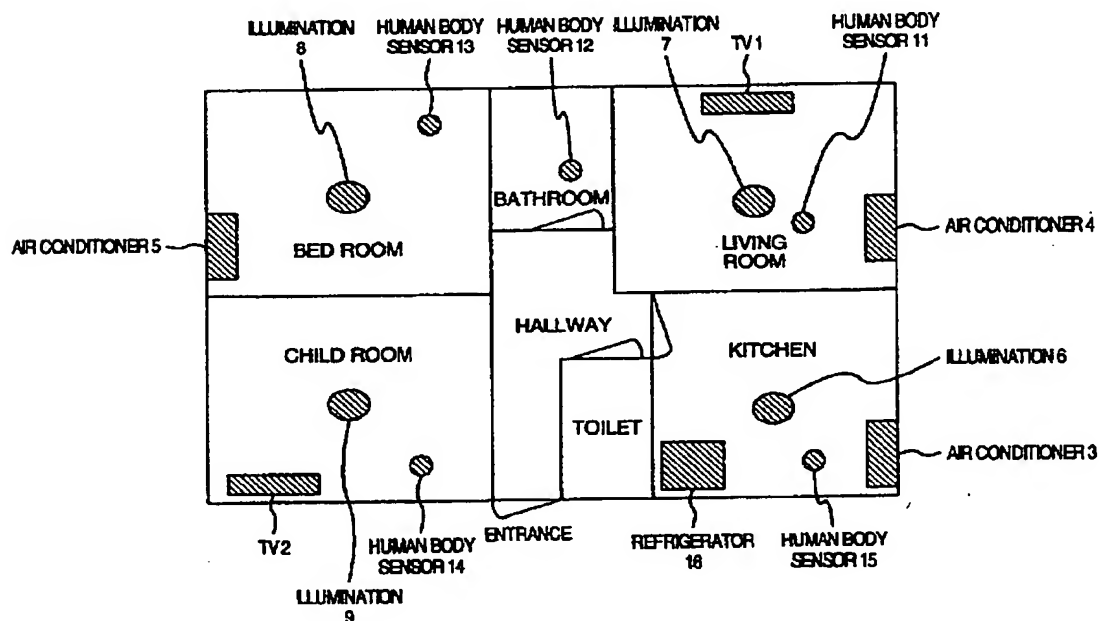
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traversed. All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated hereat by reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed. As additional arguments, Applicant respectfully submits the following.

Applicant's disclosed and claimed invention is directed toward arrangements (e.g., methods, systems, etc.) which allow the individual installation positions of appliances (e.g., TVs, air conditioning units, lighting units) within a real-estate unit (e.g., a house, business, etc.) to be determined post-installation without the necessity of having to define the appliance's installation location at the time of installation. More particularly, Applicant's example FIG. 2 is reproduced herewith:

FIG.2



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As an illustrative example, all of the TVs, air conditioners, lighting units, etc. appliances may be installed at unknown positions throughout the living room, kitchen, bedroom, child room, etc. As a human moves from room-to-room in the household over time, and interacts with the sensors and appliances to cause differing classes of operating state changes (e.g., on/off change, volume level change, temperature setting change, etc.) therein, Applicant's invention calculates occurrence time differences from occurrence times when the differing classes of operating state changes have been detected as having occurred by differing ones of the appliances, and then calculates relational distances between appliances which incur the operating state changes, based on the calculated occurrence time difference.

For example, if the sensor 11 detects a human enters the living room, and the human then turns on lighting unit 7, adjusts the temperature of the air conditioner 4, and turns on the TV1, the changes in states of such appliances over time may be used to calculate the time differences and ultimately the relational distances between the household appliances. Eventually, if enough human interactions occur over time across the entire household, data such as Applicant's example FIG 13 (reproduced herewith) may be compiled, which data may contain indicators (e.g., calculated numerical values) indicative of relational distances between the household appliances.

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FIG.13

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	APPLIANCE ADDRESS OF TV1	APPLIANCE ADDRESS OF TV2	APPLIANCE ADDRESS OF AIR CONDITIONER3	APPLIANCE ADDRESS OF AIR CONDITIONER4	APPLIANCE ADDRESS OF AIR CONDITIONER5	APPLIANCE ADDRESS OF ILLUMINATION6	APPLIANCE ADDRESS OF ILLUMINATION7	APPLIANCE ADDRESS OF ILLUMINATION8		APPLIANCE ADDRESS OF REFRIGERATOR 16
APPLIANCE ADDRESS OF TV 1		0.01	0.005	0.5	0.001	0.1	0.8	0.015	• • • • •	0.001
APPLIANCE ADDRESS OF TV 2	0.01		0.01	0.01	0.01	0.01	0	0.01	• • • • •	0
APPLIANCE ADDRESS OF AIR CONDITIONER 3	0.005	0.01		0.01	0.01	0.6	0.001	0	• • • • •	0.4
APPLIANCE ADDRESS OF AIR CONDITIONER 4	0.5	0.01	0.01		0	0.1	0.5	0.06	• • • • •	0.01
APPLIANCE ADDRESS OF AIR CONDITIONER 5	0.001	0.01	0.01	0		0.01	0.01	0.4	• • • • •	0
APPLIANCE ADDRESS OF ILLUMINATION 6	0.1	0.01	0.6	0.1	0.01		0.001	0.01	• • • • •	0.5
APPLIANCE ADDRESS OF ILLUMINATION 7	0.8	0	0.001	0.5	0.01	0.001		0.001	• • • • •	0.01
APPLIANCE ADDRESS OF ILLUMINATION 8	0.015	0.01	0	0.06	0.4	0.01	0.001		• • • • •	0.01
• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •
APPLIANCE ADDRESS OF REFRIGERATOR 16	0.001	0	0.4	0.01	0	0.5	0.01	0.01	• • • • •	

The example numerical values which are bounded by example bolded boxes indicate relatively higher values which (in this example) is an indication of appliances which are relatively close to one another (e.g., in a same room as one another).

In terms of distinguishing claim limitations, at minimum, Applicant's independent claim 1's "(a) receiving different classes of state change information from a plurality of different classes of appliances through said network, the state change information being indicative of differing classes of operating state changes of the different classes of appliances; (b) calculating an occurrence time difference from occurrence times when the differing classes of operating state changes have been detected as having occurred with respect to differing appliances of the differing

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classes of appliances, in accordance with occurrence time information indicative of occurrence times of the operating state changes included in the state change information; and (c) acquiring distance between appliances which incur the operating state changes, based on the calculated occurrence time difference."

Other ones of Applicant's claims contain similar or analogous features/limitations.

Claims 8-14 are further limited to the specific environment within a "household", and to "household appliances".

In short, in Applicant's invention, the individual installed positions of ones of differing classes (e.g., types) of appliances is discriminated by using the differing classes of state-change information from the appliances.

Turning now to rebuttal of the applied art, Parl et al. appears directed to determining the position of a cell phone between base stations. As an immediate deficiency, it is noted that only Parl et al.'s cell phone may be validly characterized as an "appliance", i.e., Parl et al.'s base stations are not properly characterized as "appliances" (they are "base stations"). Further, since Parl et al. only concerns cell phones, Parl et al.'s arrangement only concerns a single class of "appliance". As another deficiency, the Examiner has repeatedly admitted (and Applicant concurs) that Parl et al. does NOT teach: "(c). acquiring distance between appliances which incur the state changes based on the calculated occurrence time difference."

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As further description of Parl et al. and the differences thereof from Applicant's invention, the following sketch (from Applicant's foreign representative) is respectfully submitted, followed by corresponding discussion:

*COMPARATIVE SKETCH*

	PRIOR ART (PARL)	PRESENT INVENTION
	<p>CALCULATE A DISTANCE BASED ON THESE TIMES</p> <p>RECEIVE LOCATION SIGNALS FROM PORTABLE UNIT.          CALCULATE A LOCATION AND DISTANCE IN ACCORDANCE WITH A TIME DIFFERENCE.</p>	<p>CALCULATE A DISTANCE BASED ON</p> <p>SYNCHRONIZED MESSAGE SUCH AS LOCATION SIGNALS ARE NOT REQUIRED FOR THE PRESENT INVENTION</p>
<i>IDEA</i>	CALCULATE A DISTANCE ON THE BASIS OF A RECEIVED TIME DIFFERENCE	CALCULATE A DISTANCE ON THE BASIS OF A TIME DIFFERENCE OF STATE CHANGES
<i>EVENTS IN TIME</i>	RECEIVED LOCATION SIGNALS	DISCRETE STATE CHANGES
<i>RELEVANCE IN EVENTS</i>	THERE IS RELEVANCE OF THE SAME LOCATION SIGNALS RECEIVED	NO RELEVANCE ON THE SYSTEM
<i>POINT OF NOISE</i>	LOCATION SIGNAL CAN UNIQUELY BE DETERMINED, WHICH IS EASILY DISTINGUISHED FROM THE OTHER LOC. SIGNALS.	THERE ARE STATE CHANGES CAUSED BY VARIOUS FACTORS, MOSTLY NO RELEVANCE EVENTS ONE ANOTHER.

The differences between Applicant's invention and Parl are described with reference to the above sketch. More particularly, in Parl's invention, a distance between a device and a control station and their locations are calculated in accordance with a received time difference from messages transmitted from a mobile device. However, for a purpose of realizing Parl's invention, the messages transmitted from Parl's mobile device should be the same, and the same messages must be distinguished from the other.

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In contrast, in Applicant's invention, a distance between appliances and their location are calculated in accordance with only times of occurring state changes in the appliances. According to the invention, no messages from the appliances are required. Instead, state changes of the plurality of appliances are discrete in the system, and they have no relevance to one another from the beginning. Therefore, determining a mutual positioning relation is unique in such a way that relevance is extracted from information constituted for the operating state changes (each having no inter-relevance). Thereby, it can be said that the present invention presumes the mutual positioning relations under a heavy condition rather than Parl. So the difficulty ranking to presume the positioning in the present invention is higher than Parl. Accordingly, it is respectfully submitted that Applicant's invention differs from Parl.

Betran relates to a screen display method for displaying a present location of a mobile device, with has no relation to Applicant's invention.

As a result of all of the foregoing, it is respectfully submitted that the applied art (taken alone and in the Office Action combinations) would not support a '103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such '103 rejection, and express written allowance of all of the '103 rejected claims, are respectfully requested.

#### **EXAMINER INVITED TO TELEPHONE**

The Examiner is herein invited to telephone the undersigned attorneys at the local Washington, D.C. area telephone number of 703/312-6600 for discussing any

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Examiner's Amendments or other suggested actions for accelerating prosecution and moving the present application to allowance.

### **RESERVATION OF RIGHTS**

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer. That is, any above statements, or any present amendment or cancellation of claims (all made without prejudice or disclaimer), should not be taken as an indication or admission that any objection/rejection was valid, or as a disclaimer of any scope or subject matter. Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, i.e., Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

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### **CONCLUSION**

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In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are now in condition for allowance.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR '1.136. Authorization is herein given to charge any shortage in the fees, including



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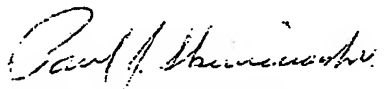
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extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (Case No. 500.40994X00) and please credit any excess fees to such deposit account.

Based upon all of the foregoing, allowance of all presently-pending claims is respectfully requested.

Respectfully submitted,

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